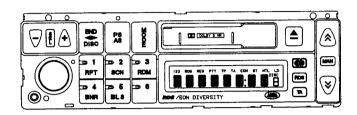
clarion Service Manual

Published by Service Information Section



■ SPECIFICATIONS:

[Radio section]

Circuit system: Tuning system: Superheterodyne Electronic tuning

Receiver range:

LW 153kHz to 279kHz

MW 531kHz to 1,602kHz FM 87.5MHz to 108MHz

Intermediate frequency: LW 450kHz

MW 450kHz

FM 10.7MHz

Quieting sensitivity:

LW Less than 42dB

(at 20dB S/N)

MW Less than 35dB

(at 20dB S/N)

FM Less than 12dB

(at 30dB S/N)

Separation:

FM More than 20dB

Auto tuning stop sensitivity:

LW DX 20~40dB

> LO 45~65dB

DX 20~40dB MW

45~65dB LO

DX 15~35dB **FM**

> 40~60dB LO

■ COMPONENTS:

PU-9836A

1 Main unit 300-9550-00 1 Mounting bracket 341-1446-01 11 [Removal tool

■ ANTI-THEFT-SYSTEM:

- · Releasing the ANTI-THEFT SYSTEM (When reinserting the car stereo or reconnecting the battery.)
- 1. Make the necessary wire connections.
- 2. Turn on POWER switch. ("CODE IN" is displayed.)
- 3. Using PRESET button 1 to 6, input the secret number.

After the last code number is entered the radio will operate.

LAND ROVER RDS/FM · MPX/MW/LW Radio Cassette Stereo with **CD Changer Control**

Model

PU-9836A

(Part No. PRC 7618)

[Tape section]

4 track, 2 channel stereo Reproduction system:

cassette tape playback

Tape speed:

4.76cm/sec (1-7/8 ips) 0.15% (W.R.M.S)

Wow and flutter: S/N ratio:

More than 56/48dB.

Dolby B ON/OFF (120 us)

More than 58/50dB.

Dolby B ON/OFF (70 us)

Cross talk:

More than 40dB

Separation: FF/REW time: More than 30dB Less than 110sec. (C-60)

[Synthesis]

Power Supply voltage:

DC 14.0V (10.8V to 15.6V)

Negative ground

Current consumption:

Less than 3mA (at ACC OFF)

Load impedance:

660Ω

Line out level:

 $0.125V \pm 6dB$

Quieting power output: More than 8W×4 178mm

Dimensions:

Weight:

Width Height 50mm

Depth

160mm

1.5kg

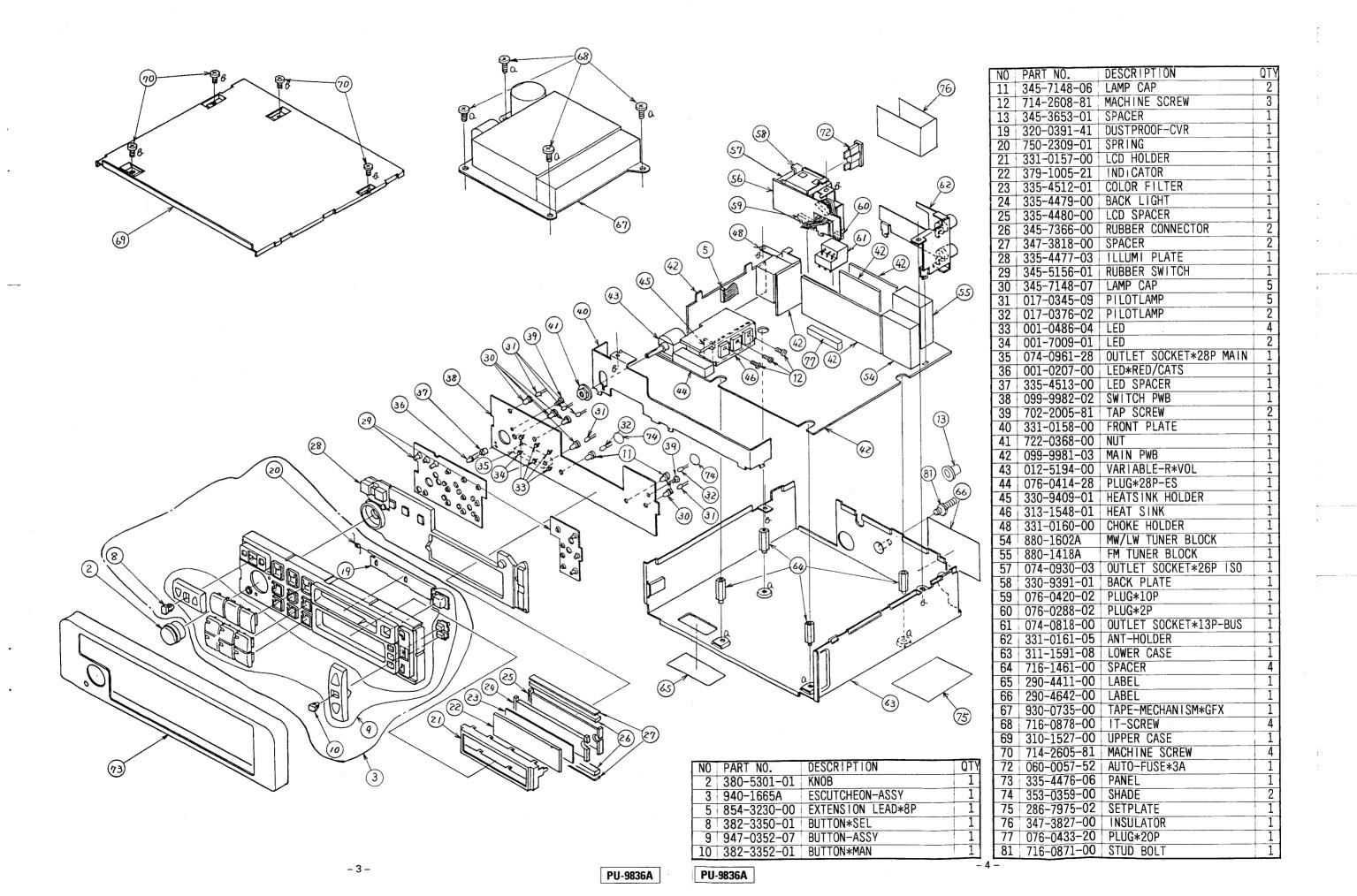
- Dolby noise reduction manufactured under license from Dolby Laboratories Licensing Corporation
- "DOLBY" and the double-D symbol are trademarks of Dolby Laboratories Licensing Corporation.
- · In case the wrong code was entered.
- 1. Finish entering all four digits.
- 2. Press BAND button for approximetely two seconds.
- 3. Input the correct code.
- · Waiting time for releasing the ANTI-THEFT SYSTEM (If the wrong code was entered at three times.)
- 1. Wait for more than an hour at the necessary wire connections.
- 2. Press BAND button for two seconds.
- 3. Input the correct code.

ADJUSTMENT:

OV	TEST-POINT		PROCEDURE			
OV		LI.CONNECT THE DIGITAL	VOLT-METER TO TP3 AND TP4.			
01	IFT601		OdB SIGNAL(no MOD), AND ADJUST THE READING OF			
ł	11.1001		TO 0±20mV BY IFT601.			
			5dB SIGNAL(400Hz,30% MOD).[OUTPUT:0dB(0.245V)]			
Limiter	VR602		TO 10dB, AND ADJUST THE OUTPUT LEVEL TO -3dB			
Dimitor	V.N.O. 0.2	BY VR602.				
		1. CONNECT BETWEEN TP9	AND TP10(5V).			
SD	VR601	()	3dB SIGNAL(400Hz,30% MOD).			
		1	T THE VOLTAGE OF TP5 IS IN THE RANGE OV TO 5V.			
		1. CONNECT THE DIGITAL	VOLT-METER TO TP6.			
S-meter	VR102	2. INPUT THE 98.1MHz/3	5dB SIGNAL(400Hz no MOD).			
		3.ADJUST THE LEVEL TO	$2.4\pm0.1V$ BY VR102.			
		1.INPUT THE 98.1MHz/6	5dB SIGNAL(7KHz 30% MOD).			
SASC	VR603	2.SET THE OUTPUT TO O	dB BY VR603 FULLY COUNTER-CLOCKWISE.(0.775V)			
		3.SET THE SSG OUTPUT	TO 43dB, AND ADJUST VR603 SO THAT THE OUTPUT			
		LEVEL IS -2dB.				
			ONNECT THE OUTPUT OF A STEREO MODULATOR TO			
Separation	VR604		TION TERMINAL, AND INPUT A 65dB SIGNAL.			
		l .	LATOR TO THE L OR R-ch AND ADJUST VR604 SO			
			PARATION IS OBTAINED.(MORE THAN 20dB)			
C.III	WDF04	1. CONNECT THE MILLI V				
CW	VR501		5dB SIGNAL(100Hz,MONO) AND ADJUST THE LEVEL			
		TO 1.77V ± 1dB BY VR				
DK	VR502		55dB SIGNAL (no MOD,SK DK on) SCOPE TO TP9,AND ADJUST VR502 SO THAT			
DK	V KOUZ		TPUT WAVEFORM IS MAXIMUM.			
Tape speed	TR101					
Tape Speed	INIUI		1.INSERT A TAPE SPEED TEST TAPE (3000Hz). 2.ADJUST THE TAPE SPEED TO 3000±45Hz BY TR101.			
	VR401		L TEST TAPE (400Hz-200nWb/m), CONNECT THE			
Dolby NR	VR402	MILLI VOLT-METER TO				
			VR402(R) TO OBTAIN AN OUTPUT OF 388mV±1dB.			
		ADJUSTMENT POINT	TEST POINT			
	TOP VIEW		BOTTOM VIEW			
			TP5			
VR	601	¬				
			TP3 TP4			
IFT 601		│				
VR 604		VR 102	7.00			
_			TP6 ↓ TPII			
F	X A	** *				
	VR502		TP7			
	VH502	VR501 /	TP12 (TP9			
5	77.	ا لم م	TPIO			
			TPI—TP8			
1		 				
TR 101 —	(> •)	VR 101	TP2			
1	VR VR	402				
1	T	VR 401				
	-					
-	•	•	·			
	MAIN PWB		MAIN PWB			

MAIN PWB
*DIVER FIX(MAIN):Connect TP12 to earth.

■ EXPLODED VIEW • PARTS LIST:



■ PARTS LIST:

Electrical sectionSWITCH P.W.B

REF NO.	PART NO.	DESCRIPTION	QTY	REF NO.	PART NO.	DESCRIPTION	TOT
	001-0207-00		1	IC102, 103	051-6005-00	IC LC75821E	2
D101-103,107	001-0486-04	LED GL1HS111	4	C101		CHIP-C 33pF	1
	001-7009-01	LED GL1HS112	2	C102		CHIP-C 0.01 µF	1
C104, 107	043-1601-10	CHIP-C 0.1 μ F	2	C103, 106		CHIP-C 680pF	2
IC101	051-1345-15	IC MB88307APFG	1				

• MAIN P.W.B

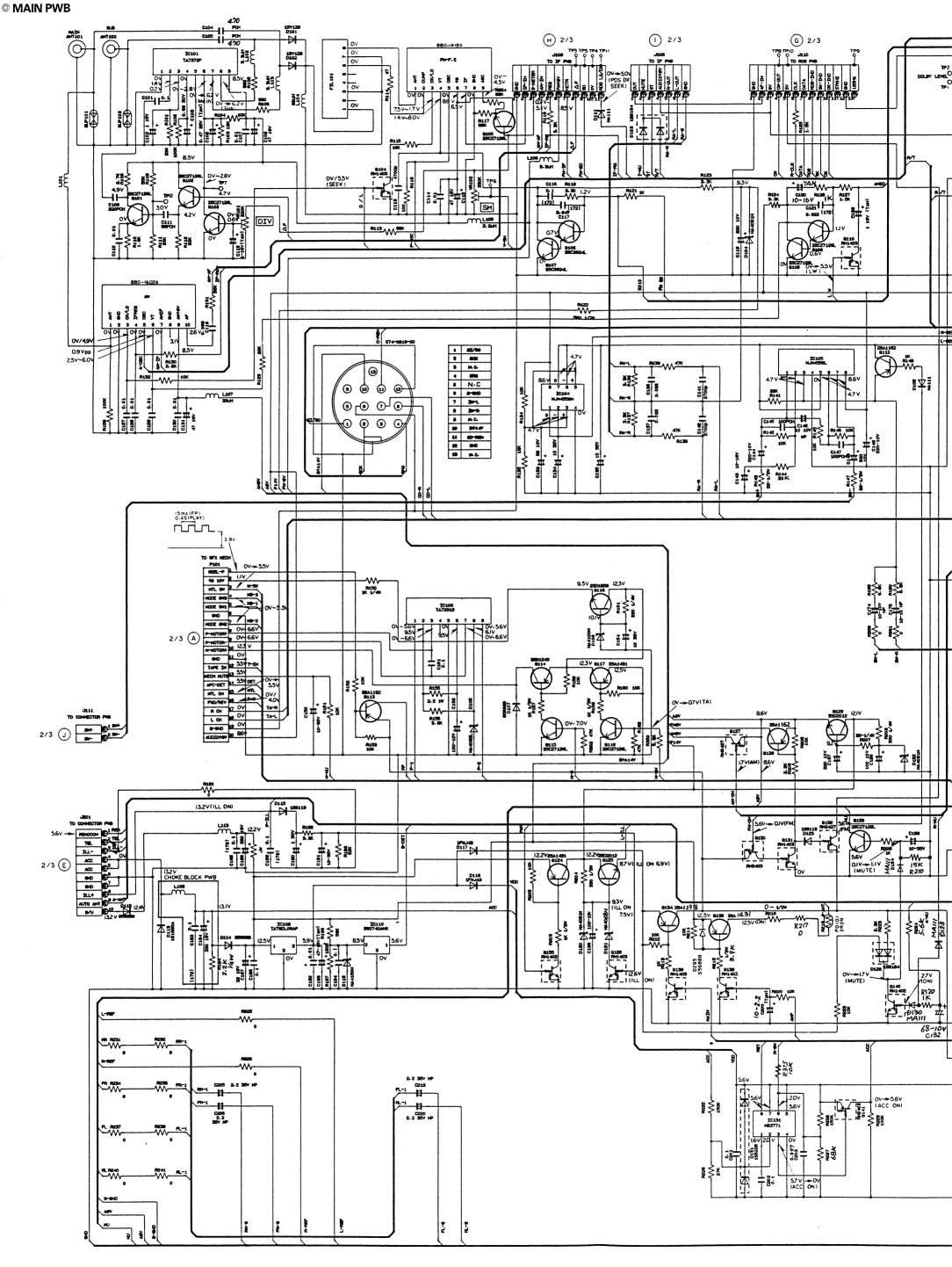
REF NO.	PART NO.	DESCRIPTION	QTY	REF NO.	PART NO.	DESCRIPTION	1 023
D113	001-0188-01	DIODE 1S1885A	1	C119, 144, 148			QT
D115, 123, 142		DIODE 188119	3	149, 461, 712	042-0452-01	ELECTRO-C 10V 220 #F	10
0115, 125, 142	001-0350-00	1SS176	اد	713, 722, 723			
D103, 128, 146			5	725			
701,702	001-0354-00	MA151WK	3	C636	043-1600-39	CHIP-C 0.039 µF	1
D145, 401	001-0356-05	DIODE 1SS181	2	C203, 517, 526	043-1600-47		8
0145, 401	001-0354-05	MA151WA		604, 608, 609	043 1000 47	σπε-σ σ.σ47 μ.τ	0
D131, 143, 144	001-0367-00	DIODE 1SS226	6	627, 628			
151, 601, 602		MA157A	ا	C514	043-1600-56	CHIP-C 0.056 µF	1
D106	001-0377-34	DIODE MA4062L	1	C118, 527, 631			3
0100	001-0376-34	MTZJ6. 2A	1	C436, 452	043-1600-82	CHIP-C 0.082 µ F	2
D121	001-0377-39	DIODE MA4068H	1	C101, 151, 188	043-1601-10	CHIP-C 0.1 µF	25
1 0121	001-0376-40	MTZJ7.5A	+	194, 201, 202	0.0 1001 10	0	-0
D120, 122	001-0377-47		2	233, 236, 249			İ
5120, 122	001-0376-48	MTZJ9.1C	١ -	253, 256, 456			
D104	001-0377-48	DIODE MA4091H	1	254, 402, 405			
5104	001-0376-49	MTZJ10A	•	460, 463, 503			İ
D108	001-0377-50	DIODE MA4100M	1	507, 510, 525			į
5250	001-0376-51	MTZJ10C	1	528, 603, 614	1		
D116	001-0377-63	DIODE MA4150M	1	624			
]	001-0376-64	MTZJ15C	-	TC119	051-0160-56	IC HD74LS07FPD	1
D107, 112, 114		DIODE \$5688B	4	IC104, 404	051-0350-55		2
295	001-0534-00	1SR139-100		1C502	051-0556-01	IC NJM2058M	1
D117, 118	001-0502-00		2	IC401,402	051-0853-01	IC M5201FP	2
D105, 111, 124	001-0516-00	DIODE MA111	7	IC131	051-0869-05		1
129, 130, 137				1C106	051-1014-10	IC TA7291S	1
138				1C405	051-1038-01	IC CXA1102M	1
D101, 102	001-0579-00	DIODE 1SV128	2	IC115	051-1046-46		1
P0601		THERMISTOR *PTH60T102	1	IC109	051-1188-01	IC TA78DLOGAP	1
P0101		THERMISTOR *PTH61GR2R	1	10602	051-1250-00	IC TC4S66F	1
IFT602		IF-TRANS *MS3A	1	IC101	051-1282-00	IC TA7372P	1
1FT601		IF-TRANS *OV	1	IC117	051-1375-35	IC	1
L113	009-0470-02		1	IC105, 701-704		IC NJM4556L	5
L109	009-0618-00	CHOKE *ACC	1	IC601	051-1525-00	IC TA8172AF	1
L101	010-2003-04	COIL *36uH	1	IC110	051-1556-05	IC S-80740AN	1
L620	010-2174-36	COIL *1mH	1	1C503	051-1817-00	IC TDA1581T	1
L621		COIL *2.2uH	1	IC501	051-1819-00		1
L105, 106, 112		COIL *2.2uH	3	1C403	051-5001-00		1
L102, 103		COIL *3.3uH	2	1C116	052-1103-01		1
L107, 111	010-2230-28	COIL *33uH	2	IC118	052-3109-01		1
L104	010-2230-33		1	SUP101, 102	060-0122-10		2
VR502	012-4318-00	VARIABLE-R *330	1	X102	060-0130-50		1
VR501		VARIABLE-R *3.3K	1	FIL101	060-0235-00		1
VR401, 402		VARIABLE-R *10K-DBY	2	X601	060-0240-00		
VR101		VARIABLE-R *220K	1	X101	061-1053-00		1
VR102		VARIABLE-R *330K	1	X501	061-3013-00		1
VR601		VARIABLE-R *10K	1	0112, 113, 128	100-1162-00	TRANSISTOR 2SA1162	8
VR603, 604	012-4863-07	VARIABLE-R *22K	2	148, 701-704	100-1179-00	2SA1179	
VR602	012-4863-09	VARIABLE-R *47K	1	Q134	100-1298-00		1
C193	042-0171-00		1	0117, 124, 135	100-1431-00		3
C120	042-0176-00	TANTALUM-C 16V 10 μ F	_1	0114	101-1243-00	TRANSISTOR 2SB1243	1
C619	042-0245-00	TANTALUM-C 35V 0.68μF	1	Q101-103, 105	102-2712-51	TRANSISTOR 2SC2712G, L	11
C198	042-0334-32		1	108, 109, 115	102-2412-50	2SC2412K-R, S	1
C197, 710, 711	042-0378-00	ELECTRO-C 10V 220 µF	5	118, 133, 154			1
709,724				605			
C112, 122, 635	042-0397-00	CHIP-C 16V 1 µF TAN	4	Q603	102-2715-00	TRANSISTOR 2SC2715	1
639				0106, 107	102-3624-00	TRANSISTOR 2SC3624AL	2
C106	042-0397-03		1	0116	103-1858-00		1
C200		CHIP-C 10V 2.2 µF TAN	1	Q129, 125	103-2012-00	TRANSISTOR 2SD2012	2
C640		CHIP-C 35V O.1 μ F TAN	1	Q604	108-0372-00	FET 2SK372	1
C607	042-0403-01		1				
C260	042-0450-00	ELECTRO-C 6.3V 470 µF	1 1				

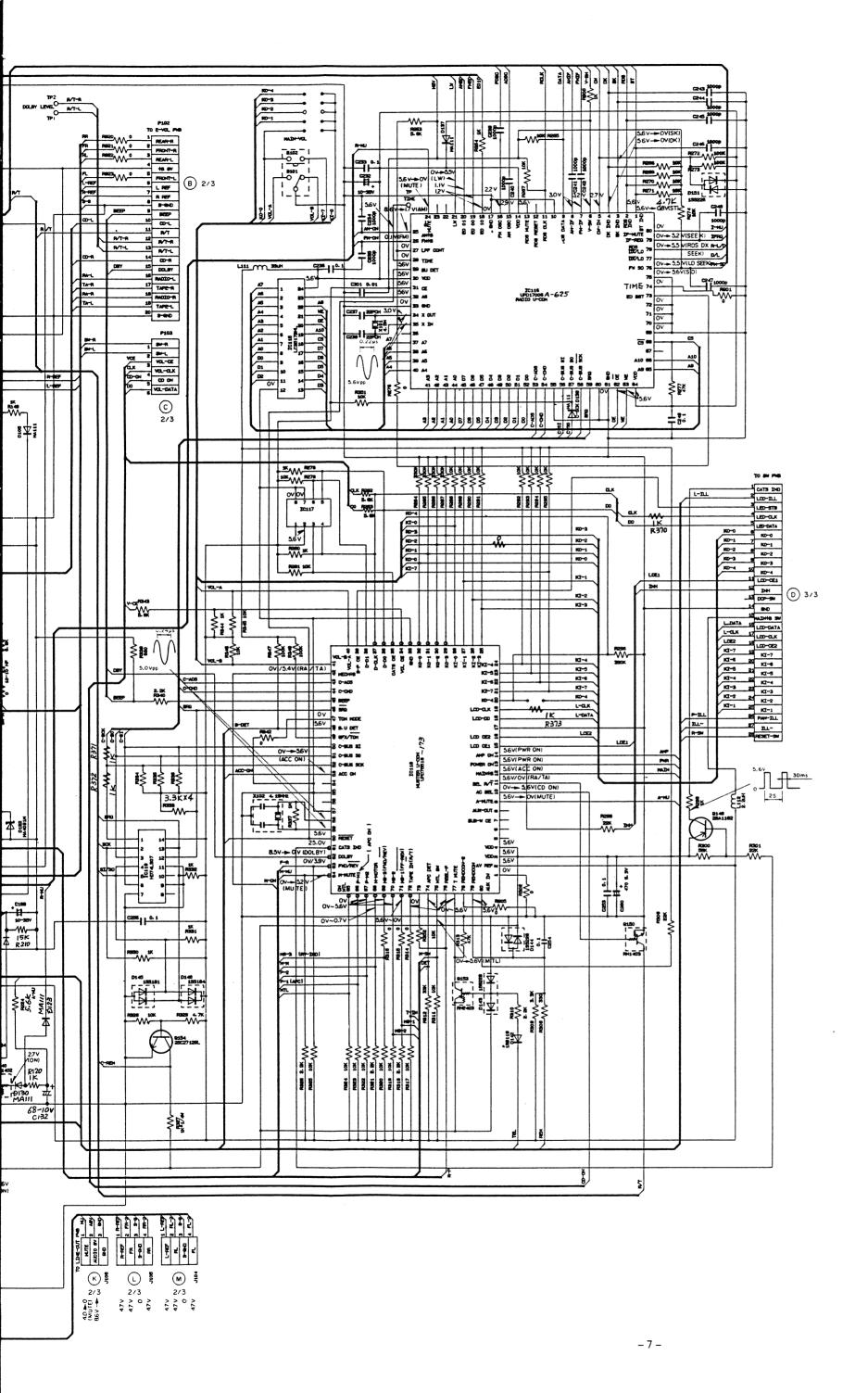
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Q130, 141, 153		TRANSISTOR RN2403	3	C441, 447	178-1232-05		2
	125-0001-02	UN2112		C530	178-1832-05	CHIP-C 0.018 µF	1
	125-0014-03	DTA124EK		C606	178-2222-05		1
Q139, 140, 155		TRANSISTOR RN1402	3	C136, 137, 605	178-2232-05		4
	125-2005-01	UN2211		617			
	125-2020-02	DTC114EK	 	C141, 142	178-2722-05	CHIP-C 2700pF	2
	125-2031-02	MUN2211		C513	178-2732-05	CHIP-C 0.027 μF	1
Q104, 110	125-2004-03	TRANSISTOR RN1403	11	C113	178-4722-05	CHIP-C 4700pF	1
	125-2005-02	UN2212	1 1	C146, 174, 175	182-1066-25	ELECTRO-C 10V 10 µF	5
150, 401, 501	125-2020-03	DTC124EK	1	703,707		-	
502, 601, 602				C602	182-4763-23	ELECTRO-C 10V 47 μ F	1
Q127, 132	125-0013-07		2	C108, 115	182-4763-33	ELECTRO-C 16V 47 µF	2
R155	114-2291-11	FILM-R 1W 2.2Ω	1	C102, 190, 412	183-1053-61	ELECTRO-C 50V 1 µF	9
C116, 183, 185	172-1041-11	POLYESTOR-C 0.1 µF	5	417, 509, 515		-	
189, 212	ļ			611, 632, 634			
C121	172-2231-11	POLYESTOR-C 0.022 µF	1	C143, 413, 459	183-1063-31	ELECTRO-C 16V 10 µF	18
C117	172-4731-11	POLYESTOR-C 0.047 μF	1	508, 511, 512		·	
C521, 522	172-6831-11	POLYESTOR-C 0.068 μF	2	531, 532, 610]		
C145, 147, 408	176-1011-00	CHIP-C 100pF	13	618, 629, 637	1		
410, 518, 701				642, 638, 702			
704, 705, 708				706, 715, 719			
714, 715, 718				C134, 135, 154	183-1063-51	ELECTRO-C 35V 10 μ F	7
721				166, 191, 199			
	176-2201-00		3	232			
	176-2211-00		3	C403, 406, 716	183-1066-21	ELECTRO-C 10V 10 µF	4
C616	176-2701-00	CHIP-C 27pF	1	720			
	176-3311-00		3	C419		ELECTRO-C 6.3V 100μF	1
C467, 506	176-4701-00		2	C152, 196		ELECTRO-C 10V 100 µF	2
C104, 105, 440	176-4711-00	CHIP-C 470pF	4	C502	183-2253-61	ELECTRO-C 50V 2.2 µF	1
448	170 5001 60	000000000000000000000000000000000000000		C205, 206, 219	183-2256-51	ELECTRO-C 35V 2.2 LF NF	16
C520	176-5601-00	CHIP-C 56pF	1	220, 432, 433			
C504	1/6-5611-00	CHIP-C 560pF	1	435, 437, 443	1		
0111, 407, 409	176-6801-00	CHIP-C 68pF	3	445, 451, 454			
C641			1	455, 466, 902			l i
C505	176-8201-00		1	903			
C523, 529	177-1542-05	CHIP-C 0.15 µ F	2	C187	183-2263-31	ELECTRO-C 16V 22 µF	1
		CHIP-C 0.22 µF	3	C401, 404, 418	183-3363-21	ELECTRO-C 10V 33 µF	3
C234, 235	178-1022-05	CHIP-C 1000pF	16	C411, 416, 519		ELECTRO-C 35V 4.7 µF	3
239-248, 621				C458, 633	183-4763-11		2
625, 626, 630	170 1000 05	01110 0 0 01 5	1	C131, 613	183-4763-31	ELECTRO-C 16V 47 μ F	2
C107, 110	178-1032-05	CHIP-C 0.01μF	23	C103, 414, 420	183-6843-61	ELECTRO-C 50V 0.68 µF	4
114, 127-130				430			
192, 301, 415				C132, 133	183-6863-21		2
431, 620, 623				C184, 186	184-3373-32	ELECTRO-C 16V 330 μ F	2
801-810							

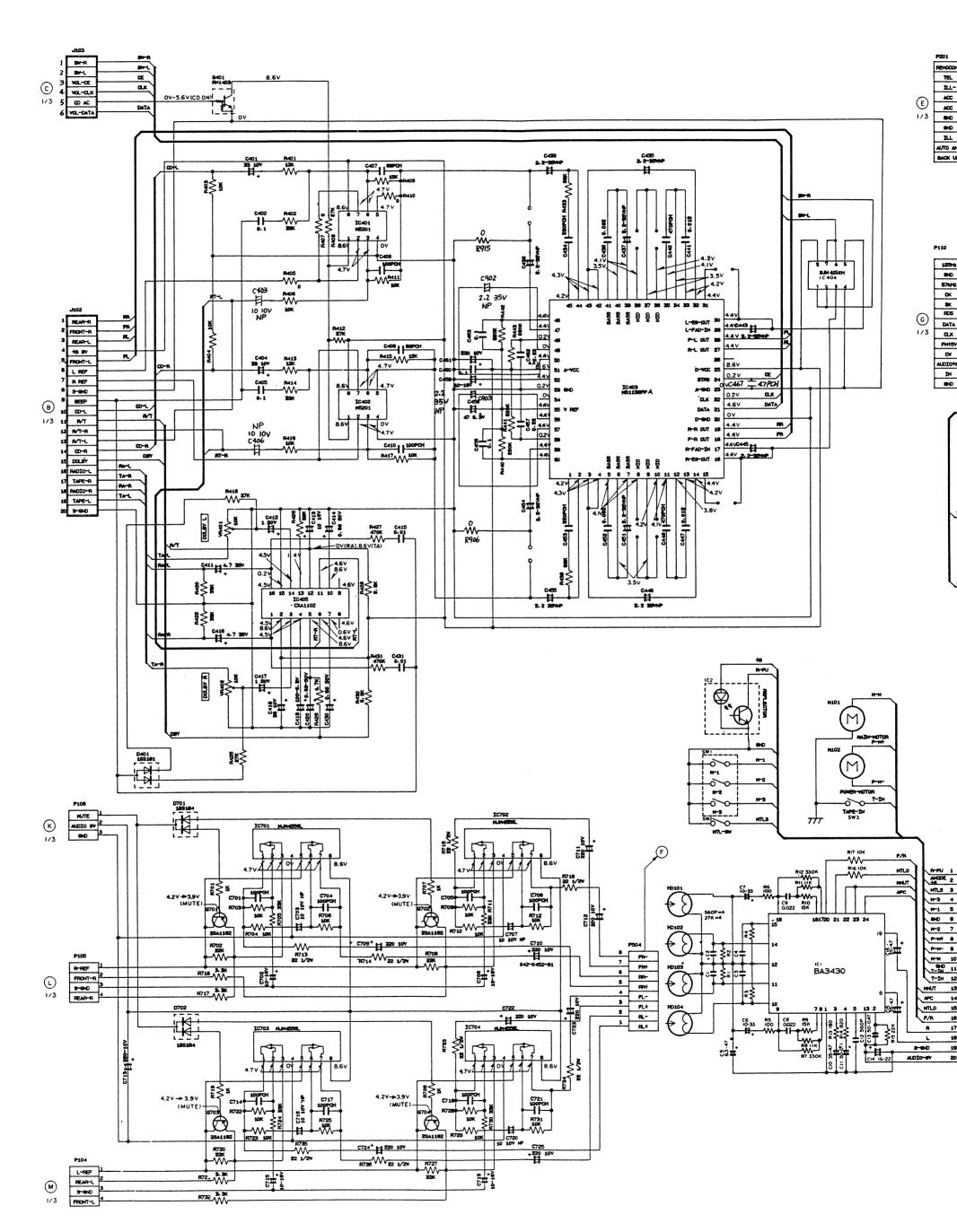
• SIDE P.W.B

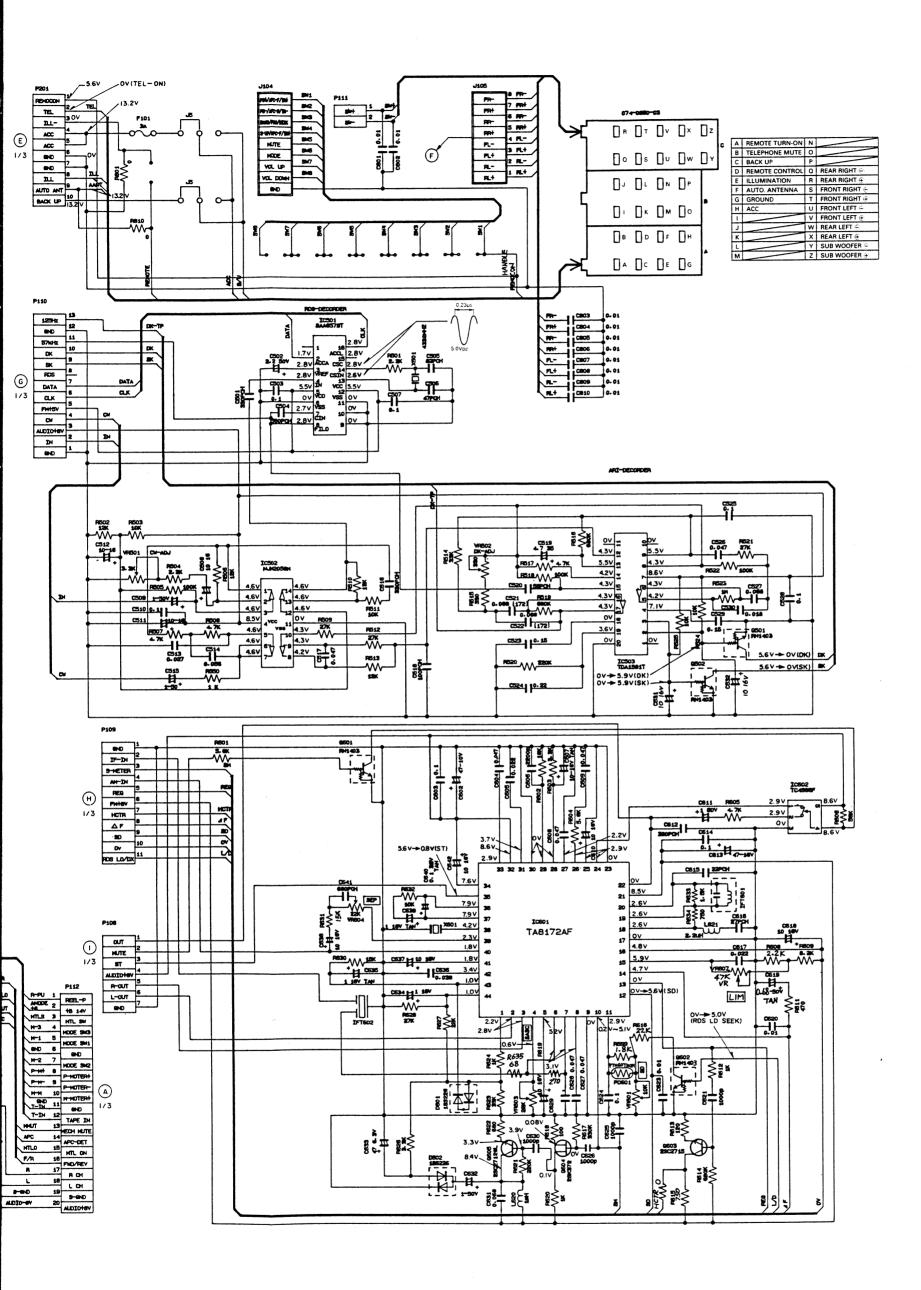
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C6, 7	042-0476-01	ELECTRO-C 10V 33 µF	2
IC1	051-1546-10		1
C8,9		POLYESTOR-C 0.012μF	2
C1-4, 12	175-5611-50		5
C11	183-1043-61	ELECTRO-C 50V 0.1 µF	1

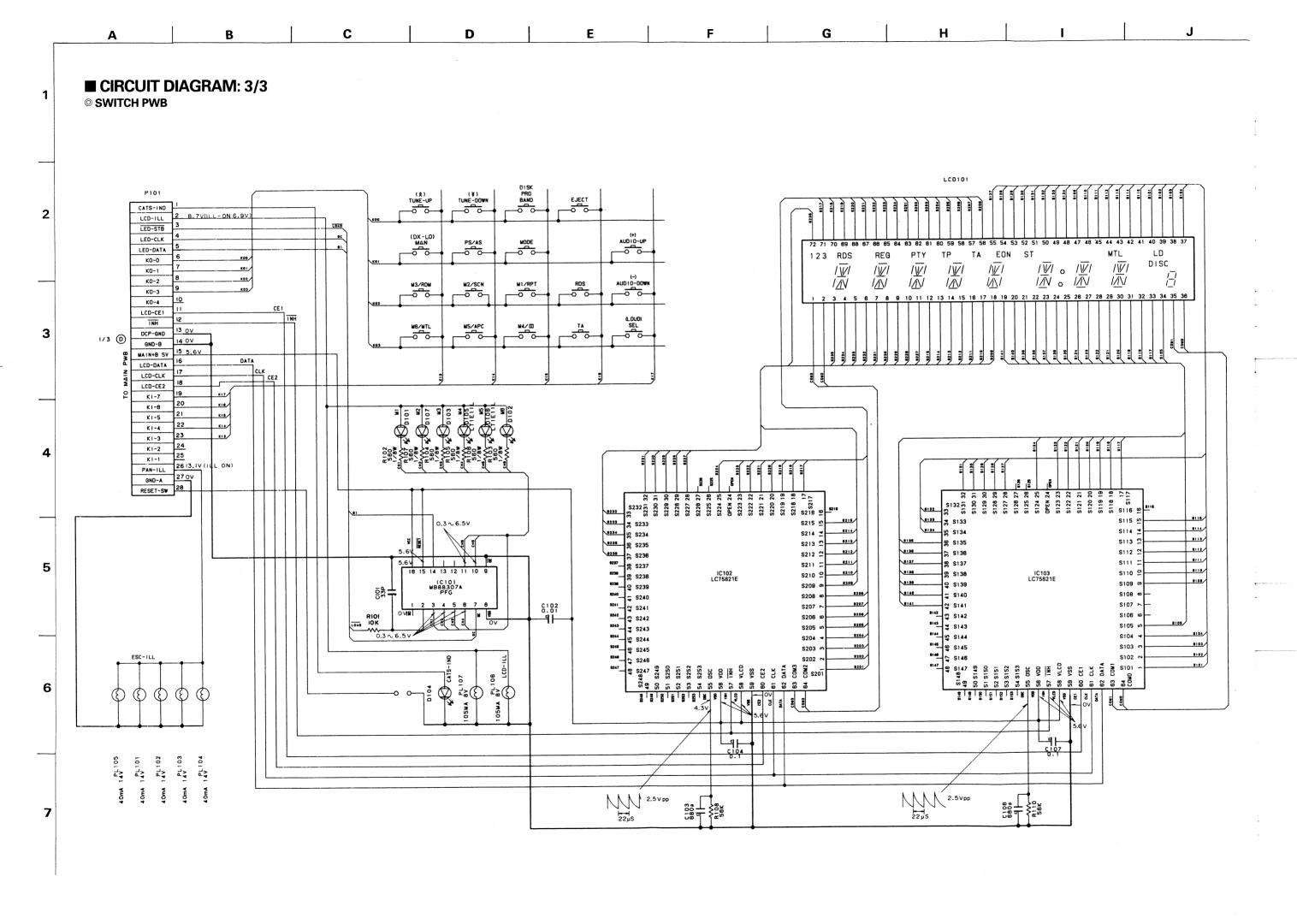
REF NO.	PART NO.	DESCRIPTION	QTY
C14		ELECTRO-C 16V 22 μ F	1
C13	183-4743-61	ELECTRO-C 50V 0.47μF	1
C10, 15, 16		ELECTRO-C 35V 4.7 µF	3
C5	183-4763-11	ELECTRO-C 6.3V 47 μ F	1



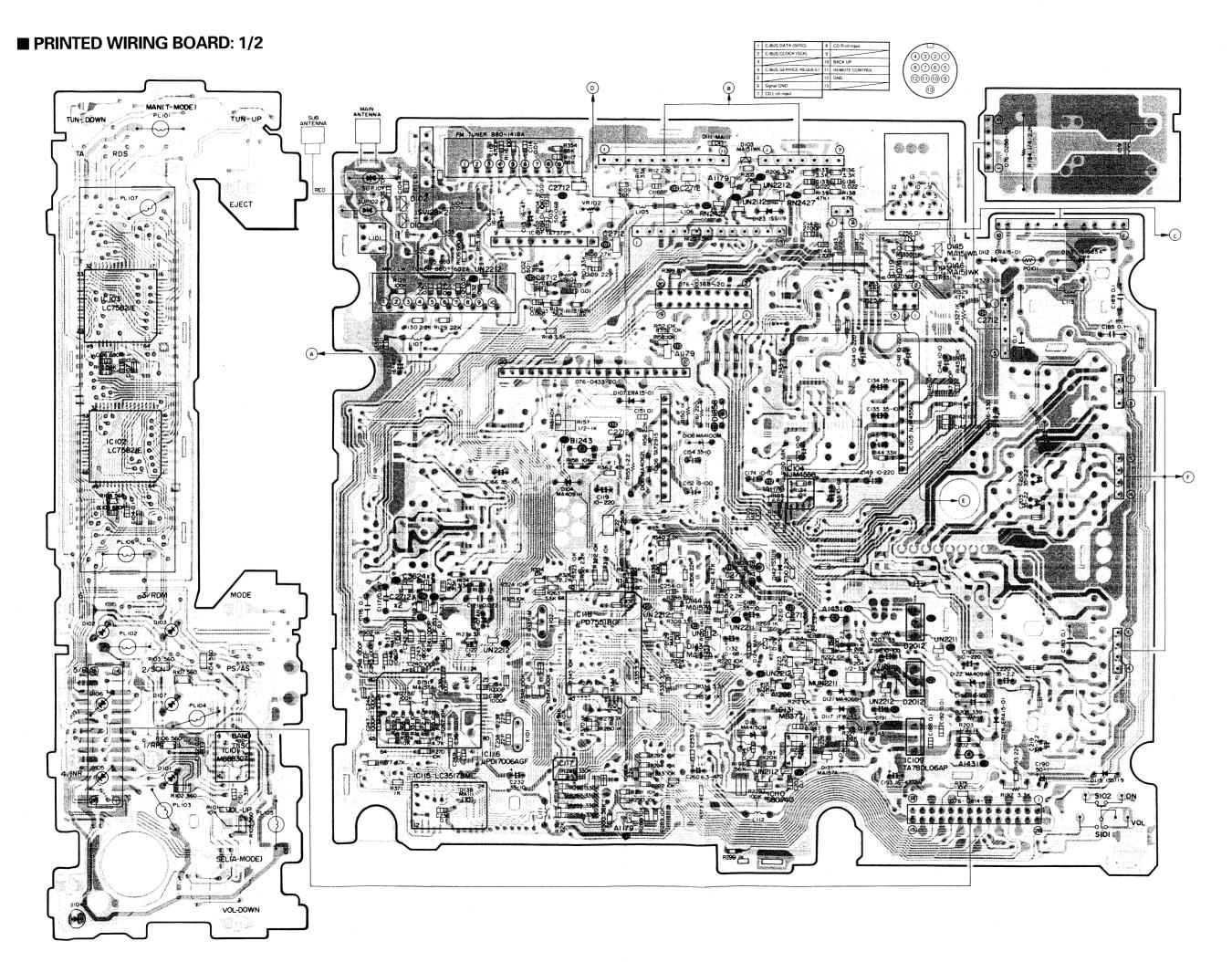








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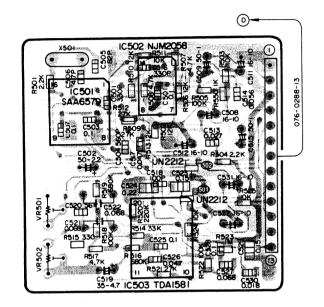


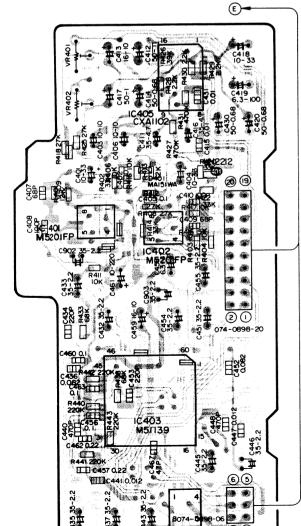
- 10 -

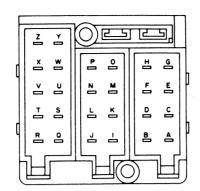
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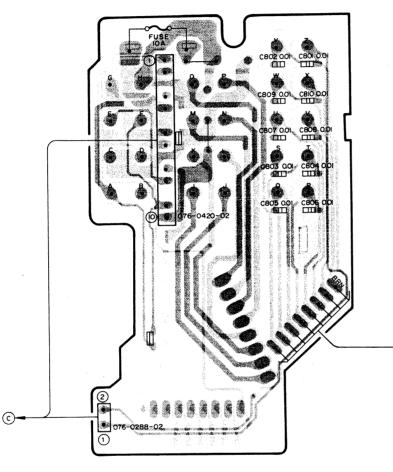
■ PRINTED WIRING BOARD: 2/2

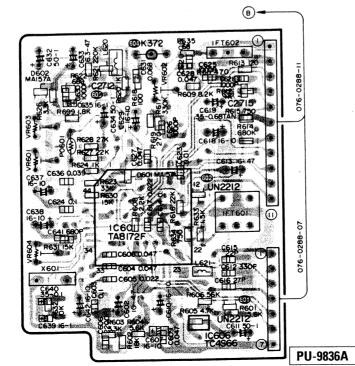
Α	REMOTE TURN-ON	N	
В	TELEPHONE MUTE	0	
С	BACK UP	Р	
D	REMOTE CONTROL	a	REAR RIGHT ⊖
Е	ILLUMINATION	R	REAR RIGHT ⊕
F	AUTO. ANTENNA	s	FRONT RIGHT ⊕
G	GROUND	T	FRONT RIGHT ①
Н	ACC	U	FRONT LEFT ⊕
1		٧	FRONT LEFT (±)
J		w	REAR LEFT 🖯
К		х	REAR LEFT (+)
L		Υ	SUB WOOFER (
M		7	SUB WOOFER (4)



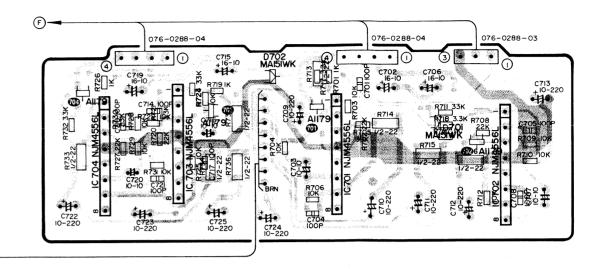


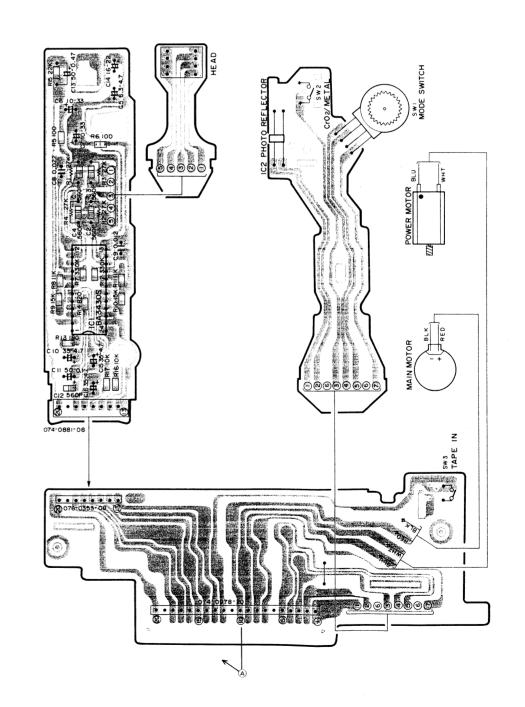






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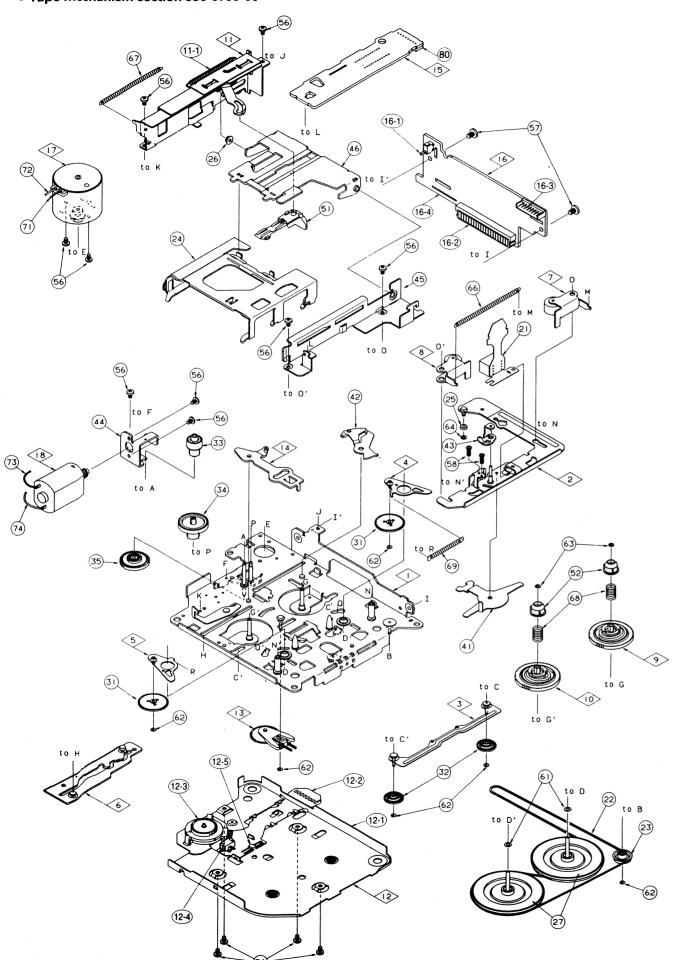




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■ EXPLODED VIEW • PARTS LIST:

© Tape mechanism section 930-0735-00



NO	PART NO.	DESCRIPTION	QT
1	960-4294-08	DECK PLATE-ASSY	1
2	960-4261-04		1
3	960-4262-03	FF/REW-P-ASSY	1
4	960-4263-01	IDLER-P-ASSY F	1
5	960-4264-01	IDLER-P-ASSY R	1
6	960-4266-05	MODE PLATE-ASSY	1
7	960-4269-04	ROLLER ASSY F	1
8	960-4270-04	ROLLER ASSY R	1
9	960-4271-02	REEL ASSY F	1
10	960-4272-02	REEL ASSY R	1
11	960-4298-90		1
11-1	750-2948-01		1
12	960-4296-90		1
12-1	960-4295-02		1
12-2	099-9548-00	FLEX PWB	1
12-3		SWITCH	1
	013-3953-00		1
12-5	051-1114-03	IC NJL5161K-P	1
12-6	746-0767-00	WASHER	2
13	960-4282-03		1
14	960-4301-02	PLAY-L-ASSY GF	1
15	099-9540-00	SIDE PWB	1
15-1	074-0881-08	OUTLET SOCKET*8P	1
16	990-0692-00	REAR-PWB-ASSY	1
16-1	013-3906-00	SWITCH	1
16-2	074-0978-20	OUTLET SOCKET*20P	1
	076-0353-08	PLUG*8P	1
16-4	099-9541-00	PWB	1
17	SMA-130-100	DC-MOTOR*MAIN	1
18	SMA-131-100	DC-MOTOR*POWER	1
21	011-0307-28	HEAD	1
22	602-0118-00	BELT	1
23	604-0046-00	TENSION PULLEY	1

NO	PART NO.	DESCRIPTION	QTY
24	606-0101-05		1
25	610-0342-01	HEAD-P-ROLLER	1
26	610-0343-00	GUIDE A ROLLER	1
27	611-0091-02	FLYWHEEL	2
31	613-0285-02	IDLER GEAR	2
32	613-0286-02	FF/REW GEAR	2
33	613-0288-01	HERICAL GEAR	1
34	613-0289-01	GEAR A	1
35	613-0290-00	POWER GEAR	1
41	630-2597-01	CHANGE LINK	1
42	630-2598-04	EJECT LINK	1
43	630-2600-01	ADJUST LINK	1
44	630-2601-02	MOTOR PLATE	1
45	630-2626-01	PWB FRAME	1
46	630-2605-01	GUIDE ARM	1
51	631-1992-01	PACK STOPPER	1
52	631-1993-01	SLIDE BUSH	2
56	716-0484-00	SCREW*M2X2.25 B	13
57	716-0761-01	SCREW	2
58	716-0833-10	AZIMUTH SCREW	2
61	746-0624-00	WASHER	2 6
62	746-0724-00	WASHER	
63	746-0761-00	WASHER	2
64	746-0762-00	WASHER	1
66	750-2946-02	PINCH SPRING	1
67	750-2947-01	EJECT-P-SPRING	1
68	750-2949-00	SLIDE SPRING	2
69	750-3017-01	IDLER-P-SPRING	1
71	800-4911-60	VINYL-COAT-WIRE*BLK	1
72	802-4911-60	VINYL-COAT-WIRE*RED	1
73	806-4914-60	VINYL-COAT-WIRE*BLU	1
74	809-4914-60	VINYL-COAT-WIRE*WHT	1